



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

647.1512
Job Sheet 190723



Part No: 647.1512

Job Qty: 8 pcs

Part Name: Breakaway Tip



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/13/19

Job Tracking No:

Due Date: 3/22/19

Created By: Marie Lajeunesse

Type: Stock

Description: SIOP

Note: DWG REV D IPP REV: A NEW ISSUE JFS 14/08/20 VERIFIED BY: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Bandsaw - 1	8 pcs	3/22/19	3/22/19	0.00	0.01	Bandsaw - 1	
110	HAAS 4 Axis - B4B	8 pcs	3/22/19	3/22/19	0.00	2.00	HAAS - 1 - B4B	
							HAAS - 2 - B4B	
							HAAS - 3 - B4B	
							HAAS - 4 - B4B	
120	QC 2	8 pcs	3/22/19	3/22/19	0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 54	
							QC 2 - 56	
							QC 2 - 57	



Container No: S165305



Part: 647.1512

Job No: 190723

Serial No/Batch: S165305

Revision:

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 03/22/19

Plex 2/13/19 3:23 PM Dart.lajeunesse.marie

130 QC 8	8 pcs	3/22/19	0.00 0.00	QC 2 - 62	
				QC 2 - 63	
				QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20 QC 8 - 23	1/48 19/3/23
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 47	
140 Outsource - 4 - Anodize	8 pcs	3/22/19	0.00 0.00		04/24/2019 12
150 Packaging 2-1 - Receive - B4B	8 pcs	3/22/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				MAY 21 2019	
				Plex 2/13/19 3:23 PM Dart.lajeunesse.marie	

155 QC 5	8 pcs	3/22/19	0.00 0.00	Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 42	DAS
				QC 5 - 43	61
				QC 5 - 49	9-89
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				180 Packaging 3-1 - Stock - B4B	8 pcs
Packaging 3 - 2 - B4B					
Packaging 3 - 3 - B4B					
Packaging 3 - 4 - B4B					
Packaging 3 - 5 - B4B					
Packaging 3 - 6 - B4B					
Packaging 3 - 7 - B4B					
Packaging 3 - 8 - B4B					
Packaging 3 - 9 - B4B					
Packaging 3 - 10 - B4B					
Packaging 3 - 11 - B4B					
Packaging 3 - 12 - B4B					
Packaging 3 - 13 - B4B					
Packaging 3 - 14 - B4B					
Packaging 3 - 15 - B4B					
Packaging 3 - 16 - B4B					
Packaging 3 - 17 - B4B					
Packaging 3 - 18 - B4B					
Packaging 3 - 19 - B4B					
Packaging 3 - 20 - B4B					
Packaging 3 - 21 - B4B					
Packaging 3 - 22 - B4B					
Packaging 3 - 23 - B4B	PC CCK 107				
Packaging 3 - 24 - B4B					
Packaging 3 - 25 - B4B					
Packaging 3 - 26 - B4B					
Packaging 3 - 27 - B4B					
Packaging 3 - 28 - B4B					
Packaging 3 - 29 - B4B					
Packaging 3 - 30 - B4B					
Packaging 3 - 31 - B4B					
Packaging 3 - 32 - B4B					
Packaging 3 - 33 - B4B					
Packaging 3 - 34 - B4B					
Packaging 3 - 35 - B4B	DAS				
190 QC 21 - SA	8 pcs	3/22/19	0.00 0.00	QC 21 - SA - 21	21
				QC 21 - SA - 70	9-89 MAY 22 2019
				QC 21 - SA - 53	
Part Op 100 - Cut Blank at 8.600"					
Descriptions: 110 - (HAAS CNC Vertical Machine) 1-Machine per folio FB319 DWG REV: <u>D</u> FOLIO REV: <u>N/C</u> 2-					
Plex 2/13/19 3:23 PM Dart.lajeunesse.marie					

debur and break all sharp edges

120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - (Outsource process-Anodize per QSI017 4.1.10.1) Issue P/O to ATG : HB043285 1- Black Anodize as per Dwg 647.1500 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Conformity is required

150 - (Receive & Inspect for Damage & Mat'l Certs)

155 - (QC5- Inspect part completeness to step on W/O)

180 - (Identify as per dwg & Stock Location: _____) ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6S2.000X0.750	7075-T6S Sheet 2" Thick Plate X 0.75" Wide	5.7360 ft (.717 ea) 7.17	100-Bandsaw - 1	5044634 x 9' 5156127 x 1'

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Bandsaw - 1	M7075T6S2.000X0.750	6	7	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Breakaway Tip	0.130inches ± 0.010	0.140 0.120	0.130	
2	Breakaway Tip	45.000degrees ± 0.500	45.500 44.500	Angle 45°	
3	Breakaway Tip	4.910inches ± 0.010	4.920 4.900	4.915	
4	Breakaway Tip	4.098inches ± 0.005	4.103 4.093	4.098	
5	Breakaway Tip	1.341inches ± 0.005	1.346 1.336	1.341	
6	Breakaway Tip	0.250inches ± 0.010	0.260 0.240	Radius 0.250	
7	Breakaway Tip	0.188inches + 0.005 - 0.001	0.193 0.187	Diameter 0.188	
8	Breakaway Tip	0.129inches + 0.005 - 0.001	0.134 0.128	Diameter 0.129	
9	Breakaway Tip	0.380inches ± 0.010	0.390 0.370	0.380	
10	Breakaway Tip	0.580inches ± 0.010	0.590 0.570	0.580	
11	Breakaway Tip	0.375inches + 0.002 - 0.000	0.377 0.375	0.375	
12	Breakaway Tip	0.101inches ± 0.002	0.103 0.099	0.101	
13	Breakaway Tip	1.500inches ± 0.002	1.502 1.498	1.500	
14	Breakaway Tip	0.760inches ± 0.010	0.770 0.750	0.760	
15	Breakaway Tip	0.320inches ± 0.005	0.325 0.315	0.320	

Plex 2/13/19 3:23 PM Dart.lajeunesse.marie

DAS
52
9-89
19/03/22

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043285



Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB043285

PO Date: 4/24/19

Due Date: 5/1/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED
2019-05-13

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	190723	647.1512	Breakaway Tip (Outsource process-Anodize per QSI017 4.1.10.1) Issue P/O to ATG : 1- Black Anodize as per Dwg 647.1500 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Conformity is required	Firmed	-	5/1/19	10 pcs	0 pcs	10 pcs	\$13.00/pcs	\$130.00
2	190722	647.1511	Lower Deflector (Outsource process-Anodize per QSI017 4.1.10.1) Issue P/O to ATG : Hard Anodize Color Black, Prime as per Dwg 647.1500 Rev. D.	Firmed	-	5/1/19	10 pcs	0 pcs	10 pcs	\$13.45/pcs	\$134.50
	192598			Firmed	-	5/1/19	2 pcs	0 pcs	2 pcs	\$13.45/pcs	\$26.90
Sub Total:							12	0	12		\$161.40
3	190595	647.7812	Center Plate, Upper Issue P/O to ATG : Hard Black Anodize and Prime Dwg 647.7800 Rev. A	Firmed	-	5/1/19	7 pcs	0 pcs	7 pcs	\$11.05/pcs	\$77.35



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043285



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	192736	649.5214	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N	Firmed	-	5/1/19	10 pcs	0 pcs	10 pcs	\$11.30/pcs	\$113.00
5	192694	649.5212	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N	Firmed	-	5/1/19	10 pcs	0 pcs	10 pcs	\$11.30/pcs	\$113.00
6	192700	649.5113	Wiper Deflector Shim - Issue P/O to ATG : - Hard Anodize Black, Type 3, Class 2 as per Dwg. - Prime as per Dwg. Certification of Conformity is required.	Firmed	-	5/1/19	8 pcs	0 pcs	8 pcs	\$8.55/pcs	\$68.40
7	192695	649.5110	Wiper Deflector (Outsource process-Anodize per QSI017 4.1.10.1) Outsource process-Anodize per QSI017 4.1.10.1 Issue P/O to ATG : 1- Black Anodize as per Dwg 649.5100 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Conformity is required	Firmed	-	5/1/19	10 pcs	0 pcs	10 pcs	\$10.85/pcs	\$108.50
Grand Total:											\$771.65



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB043285



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 5/13/19 8:34 AM Dart.Guerin.Kimberley



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 917847

Date: 17-May-19

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Patrick Lussier
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
✓ 10 ea	Part: 647.1512 Breakaway Tip Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Job: 24997 PO: POHB043285	Rev: D Line: 1	RECEIVED MAY 17 2019 DART AEROSPACE LTD.
✓ 10 ea	Part: 649.5214 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 25000 PO: POHB043285	Rev: C Line: 4	RECEIVED MAY 17 2019 DART AEROSPACE LTD.
✓ 10 ea	Part: 649.5212 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 25001 PO: POHB043285	Rev: C Line: 5	RECEIVED MAY 17 2019 DART AEROSPACE LTD.
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>MAY 17 2019</u> Made in Canada.			



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 917847

Date: 17-May-19

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Patrick Lussier
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via
		ATG Delivery
Quantity	Description	
	Certified Signature: _____ Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.	
Made in Canada.		